Chapter 4

Combat Service Support Planning

COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE, SURVEILLANCE, RECONAISSANCE (C4ISR)

4-1. To be successful in battle, commanders must make sound decisions rapidly. Battle staffs assist the commander in making these decisions and translating them into coherent changes to the concept of support. Units must act quickly and decisively once changes are received to maintain logistical support.

4-2. This chapter describes C2 techniques and procedures that exploit the unique capabilities of digitized forces. It will assist the DISCOM commander and his battle staff in realizing the advantages of automated information exchange during the planning, preparation, and execution phases of combat operations.

BATTLE COMMAND

4-3. Battle command is the art of battle decision-making and leading. It includes controlling operations and motivating soldiers and their organizations into action to accomplish missions. Armed with the knowledge of the current state and the desired end state, commanders visualize those actions necessary to achieve the desired future state and then translate that visualization into action. It also includes the following:

- Assigning missions.
- Prioritizing and allocating resources.
- Selecting the critical time and place to act.
- Knowing how and when to make adjustments during the fight.

THE ARMY BATTLE COMMAND SYSTEM

4-4. Army battle command systems (ABCS) provide the DISCOM with the C2 systems that enable the DISCOM commander to see the battlefield with unprecedented clarity in near-real time.

4-5. The ABCS is designed to provide the commander and his staff with the needed information to effectively plan, coordinate, control, and direct the battle. The ABCS includes the global command and control system-Army (GCCS-A), the ATCCS of which CSSCS is the CSS component of ABCS, and the FBCB2.

4-6. The key knowledge base is in the battalion HQ. Currently the data is gathered by MCS at this level. The information is provided to the battalion TOC via the tactical internet. From the battalion, it

is in turn provided to the other companies for their common relevant picture and to DISCOM, for its knowledge base. This current system places a significant burden on the battalion staff to simply move information from one location to the other.

BATTLEFIELD VISUALIZATION

4-7. The definition of battlefield visualization is the process whereby the commander develops a clear understanding of the current state with relation to the enemy and environment, envisions a desired end state which represents mission accomplishment, and then subsequently visualizes the sequence of activities that moves the commander's force from its current state to the end state."

4-8. Battlefield visualization is the mental process that supports the commander's decision-making process and his ability to anticipate support. Using a vision of proposed support of the battle allows the commander to know when, where, and if a decision should be made. It is a continuous process that commences with the receipt of the first warning order and continues through the end of an operation. It provides the key to where and how the commander can best provide support.

4-9. Digital information systems have the capability of providing a clearer picture to the commander. Digital systems enhance the commander's ability to have an understanding of the current state of friendly and enemy forces. This extends beyond the knowledge of their physical location and includes environmental, readiness, and human considerations. It includes the ability to see and understand the dynamic relationship between opposing forces as the commander leads his forces through the sequence of events.

4-10. The available digital information systems enhance the commander's situational understanding by providing him with an unprecedented level of friendly and enemy information. Commanders must recognize that the common relevant picture that is produced by a myriad of information systems represents both known and estimated information, and is possibly flawed by human input. The commanders must tailor this information with their judgment, intuition, and experience.

COMMAND AND CONTROL SYSTEM

4-11. The C2 system refers to the arrangement and functions of personnel, equipment, communications, facilities, and procedures a commander employs in planning, directing, coordinating, and controlling forces and operations in the accomplishment of a mission. The C2 system are two dependent concepts that have distinctive meanings rather than one word or system. Command is the art and science of assigning missions, prioritizing resources, guiding and directing subordinates, and focusing the entire division's energy to accomplish clear objectives. Control is defining limits, computing requirements, allocating resources, prescribing

requirements for reports, monitoring performance, identifying and correcting deviations from guidance, and directing subordinate actions to accomplish the commander's intent. The C2 system must support the ability of the commander and his staff to anticipate plans for future operations even while focusing on current support requirements. The related tools for implementing command decisions include communications, computers, and intelligence.

4-12. There are two types of control; procedural and positive. The ABCS will allow us to move from procedural to positive control. Procedural control is indirect. Commanders use regulations, policies, doctrine (principles and graphic control measures), techniques and procedures, and SOPs to impose procedures that control subordinate unit actions. Digitization of the DISCOM's C2 systems will increase the commander's situational understanding and reduce the requirement for excessive control measures. Positive control requires the active involvement of all leaders. The dangers of positive control are that it will also lend itself to information overload, increase in fatigue, and the risk of allowing the commander to over control the situation. Commanders must guard against robbing subordinates of their latitude by micromanaging the movement of small units.

INFORMATION FOCUS

4-13. The common relevant picture is derived from multiple databases and can be tailored to specific unit needs. The systems, which provide input to the commander's MCS terminal, include the following:

- **FBCB2**. Provides situational understanding of friendly ground maneuver elements from individual weapons platforms through battalion echelons with near-real time information. Unit databases continuously exchange information producing the common, relevant picture. The friendly situation is automatically updated with current unit locations, their CP locations, and logistical status.
- **ASAS**. Combines the information from many sources to include space and aerial platforms, sensors, and reports from other units, human intelligence, and information derived from computer-assisted intelligence analysis to provide a detailed picture of the enemy's situation and intent.
- **CTIS**. Engineer terrain visualization gained through combined terrain information system (CTIS) and MCS will allow the commander to view terrain represented digitally in three dimensions, showing percent of slope, types of vegetation and trafficability and other man-made features (including known and templated obstacles).

4-14. The ATCCS, with MCS as the central focus at the battalion level, will enhance mission planning, rehearsal, and execution. Simulation will facilitate the decision making process by assisting

the commander in the wargaming process and evaluating courses of action. The MCS will also allow the commander to conduct rehearsals remotely using distributed communications on digital terrain. During execution of the operation, MCS provides the commander the tools to monitor, coordinate, and revise execution across the entire spectrum of his battlespace.

4-15. The key to the experienced and intuitive commander's effective exercise of battle command is information management. All information that is produced and processed, whether by automated or manual information systems, has one overriding purpose: to help the commander formulate and answer sustainment requirements and then make timely decisions.

Commander's Critical Information Requirements

4-16. The digital information system employed by the commander and staff is as sophisticated as the weapon systems they employ. The information available to the commander is only valuable if it can be focused to a manageable level. Information that the battle staff generates focuses on and is driven by the CCIR. The commander and his staff prepare it. They are based upon the commander's continuously evolving vision for the concept of support (current, future, and sequel to the future) and the commander's continuing, independent estimate of the situation. The staff supports the commander's development of CCIR, develops the common relevant picture in response to the CCIR and other parameters the commander identifies. The battle staff manages the type and volume of information fed to the commander based upon satisfying the commander's CCIR. In response to the CCIR, information systems focus on getting the right information to the commander or decision-maker as soon as possible. The battle staff processes most information into an information product (knowledge) that enables the commander to quickly grasp the meaning of the information and its impact. This should not imply that the commander does not receive any unanalyzed data. He does, in the form of spot reports, situation reports and other combat information from his subordinate commanders.

4-17. The use of CCIR focuses the information gathering process for the battle staff. It is that information which the staff will notify the commander, regardless of his location or time. They vary with each phase of an operation and consist of only those essential information requirements that the commander must know to make a decision concerning logistical support of a particular phase of a battle. The battle staff must continuously update the CCIR so that they are current with the ongoing operation. The following sources normally feed the CCIR:

- Priority of information requirements (PIR) - What we want to know about the enemy?

- Essential elements of information (EEI) - Crucial information on enemy and environment needed by commander by a specific time.
- Essential elements of friendly information (EEFI) - How the enemy sees the friendly unit?
- Friendly forces information requirements (FFIR) - They allow the commander to see how the unit sees itself?

4-18. How can the commander anticipate CSS requirements to best support the division's combat mission? The CCIR allows the commander to define information needs and, in turn, focuses the staff (and subordinate commanders) on information acquisition, fusion, and analysis. The CCIR can be further described as being:

- Dependent upon the situation.
- Specified by the commander for each operation or phase.
- Generally time-sensitive in terms of the decision point on a decision support template or the event requirements of the synchronization matrix driving their collection.
- Applicable only to the commander, who specifies and publishes them; normally published in the applicable operations plan/order; and transmitted via specified means.
- A link between current, future, and sequels to operations.

LOGISTICS PREPARATION OF THE BATTLEFIELD (LPB)

4-19. Logistics preparation of the battlefield is the process of gathering data against pertinent battlefield components, analyzing their impact on sustainment, and integrating them into tactical planning so that support actions are synchronized with maneuver. It is a conscious effort to identify and assess those factors, which facilitate, inhibit, or deny support to combat forces. Just as intelligence preparation of the battlefield is important to the conduct of actual combat operations, logistics preparation of the battlefield is equally important to sustaining the combat power of the force. Although it may be true that even the most optimal support plan may not win the battle, it is also true that poorly planned support can certainly lose it. Working together leaders must synchronize support actions with maneuver in a unified plan so that CSS is a factor in the success of a mission rather than a cause of failure. In addition to mission, enemy, terrain, troops and time available and civilians (METT-TC), logistics preparation of the battlefield focuses on determining the status and impact of the specific components that make up tactical CSS. It assesses how time and space requirements and restrictions of the battlefield affect support.

4-20. The process requires tacticians to understand the data needed by logisticians to plan and provide timely, effective support. It requires TF logisticians to understand the mission, the tactical plan, and the battlefield's time and space implications for support.

It is a coordinated effort to prepare the battlefield logistically. The basic steps in systematizing the process are:

- Determine battlefield data pertinent to support actions.
- Determine sources from which raw data can be derived.
- Gather pertinent data.
- Analyze collected data elements and translate them into decision information by assessing their impact on the mission and the competing courses of action.
- Integrate decision information into tactical planning by incorporating it in CSS estimates and TF plans and orders.

4-21. When determining what battlefield data are relevant to sustainment, it's helpful to break down CSS operations into certain key elements against which data can be collected for study and analysis. These data elements are called the components of tactical CSS. The following descriptions of the components of tactical CSS are not intended to be all-inclusive. They are offered here, however, to stimulate thought and to facilitate an understanding of those factors which impact on tactical CSS support:

- Logistics resources are the wherewithal to effect support, including CSS organizational structures, command and control, task organizing for support, communications, information automation systems, medical facilities, and materiel such as transportation assets and supply, maintenance and field services equipment.
- Logistics capabilities include soldier and leader skills and the personnel staffing which, collectively, activate CSS resources and bring to life the required support. Capabilities are degraded in adverse situations such as severe climatic conditions, night operations, or elevated mission-oriented protective postures (MOPP).
- Logistics capacities include reception and clearance capacities, carrying capacities of transportation assets, volumes of storage facilities, maintenance production output rates, and supply route characteristics such as surface composition, tunnels, overhead obstructions, bridge weight limits and traffic circulation rates.
- Materiel stocks include the quantity and status of weapon systems, ancillary equipment, ammunition, repair parts and consumable supplies required or available to sustain or reconstitute combat power of deployed units. Also included are CSS status reports and known or projected shortfalls.
- Consumption and attrition rates include experienced or expected usages of consumable supplies and weapon systems, which must be considered to anticipate support requirements.

- Time and space factors are those requirements and restrictions of the battlefield, which influence whether logistic support is provided to deployed forces at the right place and time. Included here are plans, orders, rehearsals, priority of support, positioning for support, tempo of support (intensity of demand), security, risk assessment, the effects of terrain, weather, contaminated areas, minefields, night time enemy threat on CSS operations, and the battlefield signatures of logistic resources. Time and space factors, especially, impact on the synchronization and integration of CSS on the battlefield.

4-22. Sources from which relevant battlefield data are derived include:

- Higher headquarters briefs, plans and orders.
- The commander's planning guidance. This is made up of the restated mission, initial concept of the operation, scheme of maneuver, deception objective, rear operations priorities, time plan, type of order to be issued, and type of rehearsal (backbrief, reduced force, full force). It may indicate what support tasks are required before, during, and after the mission.
- The commander's intent (or concept). The intent may indicate when and where support actions are to be synchronized with maneuver, thereby suggesting CSS triggering mechanisms.
- Operations and intelligence briefings and overlays. These provide locations of friendly and enemy forces, weather, terrain, likely logistics release points, resupply routes and distances.
- Modified table of equipment (MTOE) of task force units. These provide data on CSS resources, capabilities and capacities.
- CSS status reports. These reports from CSSCS and FBCB2 digital systems and manual sources, provide data on the readiness of primary weapon systems and materiel stocks.
- Scouts. They are especially helpful if the need to gather data against the components of tactical CSS is included in their collection requirements (such as airlift resupply landing zones).
- Engineer route reconnaissance overlays.
- Traffic circulation and highway regulating plans.
- Personal reconnaissance. Logistics battle staff members may be required to collect data on likely resupply routes, obstructions, bridge weight limits or the composition of streambeds.

4-23. Logisticians routinely apply, available battlefield data in developing CSS estimates without thinking of it as a formal process. By focusing on the components of tactical CSS while

collecting, analyzing, and applying this critical information in planning, logisticians systematically help prepare the battlefield for their commanders. These lessons are offered to stimulate a reciprocal understanding among tacticians and logisticians of the interdependency that exists between maneuver and support in planning, preparing, and executing combat missions.

4-24. Logisticians should treat the components of tactical CSS as essential factors that should be assessed for each plan. By doing so, they bring a professional approach to the contributions they make in the planning process. The components are variables. Some are dynamic and change with METT-TC so they should be validated daily, even hourly, if necessary. Commanders should appreciate the unique contributions their logisticians make in the planning process and when they've done a thorough job of collecting and analyzing pertinent battlefield data. Commanders must not accept less. The lessons that follow show how the components of tactical CSS relate to the sustainment imperatives of anticipation, integration, continuity, responsiveness and improvisation. They also show how the components of tactical CSS are used in developing effective CSS estimates.

4-25. The commander and staff conduct LPB. Successful LPB contributes immeasurably to the favorable outcome of battle. Logistics preparation of the battlefield is an on-going process by which logisticians analyze:

- Tactical commander’s plan/concept of operation.
- Tactical commander’s intents.
- Supported force CSS requirements.
- Available CSS resources.
- Combat service support shortfalls.
- The enemy (intentions, capabilities, weaknesses, doctrine).
- Terrain and weather.
- Intelligence preparation of the battlefield (IPB) products.
- Transportation infrastructure.
- Host nation support available.
- Time/distance factors.

4-26. Logistics preparation of the battlefield (LPB) products are:

- A logistics estimate.
- A visualization of the pending battle and logistics activity required by phase of operation.
- Anticipated logistics challenges and shortfalls.
- Solutions to logistics challenges and shortfalls.
- How, when, and where to position logistics units to best support the tactical commander’s plan.

- A synchronized tactical and logistical effort.

INFORMATION MANAGER

4-27. The DISCOM commander appoints an information manager because of the importance and volume of information in the DISCOM. The XO may be the information manager for the battle staff. He oversees the staff in processing information to support the operation and the information flow that feeds the force-level knowledge system. Because the CCIR are directly linked to current, future, and sequel operational situations and previously identified decision requirements, the XO ensures that the staff collects, analyzes, and presents information meeting the CCIR on a timely and accurate basis. In particular, he supervises the DISCOM's part of the sustainment cell in maintaining and disseminating the DISCOM's knowledge base which is a logistical data-base that contains information meeting the commander's common relevant picture requirements. The common relevant picture is a comprehensive view of the commander's battlespace, consisting of a graphic portrayal of the enemy and friendly situation on the same display. In the digital CP, these are typically computer-generated flat board displays. The operations section of the sustainment cell CP generates specific requests for information from BOS or other sources to answer the commander's CCIR. The S2/S3 plans cell generates requests to answer planning specific questions. Specific queries can be initiated within MCS and CSSCS or flags placed on select information to ensure that it is rapidly forwarded to the commander.

SUPPLY OPERATIONS

SUPPLY SUPPORT OPERATIONS

4-28. The two types of support operations are shown below. These operations include regular resupply of all classes of supply:

- **Mission support**. Mission support is designed for a specific maneuver operation. The designated CSS elements conduct mission support to ensure maximum unit resources is available to support the fight and the specific operation is not hampered by a lack of supply support.
- **Continuous Support**. Continuous support operations keep the maneuver unit's resources sustained over a period of time. Continuous support operations are conducted as close to the supported unit as practical.

BASIC LOAD

4-29. For classes of supply other than ammunition, basic loads are supplies kept by units for use in combat. The quantity of each item of supply in a basic load is based on the number of days the combat unit may have to sustain itself without resupply and on available transportation assets. For ammunition, the basic load is

the quantity of ammunition required to be on hand to meet combat needs until resupply can be accomplished. The basic ammunition load is specified by the Army services component commander (ASCC)/Army forces (ARFOR) commander and is expressed in rounds, units, or units of weight, as appropriate.

MISSION LOAD

4-30. Mission loads consist of those materiel required for a specific mission (for example, a standard fixed minefield). The basic load can be used for missions to save time; however, it is to be replenished from the materiel in the mission load.

4-31. Mission loads normally stretch or exceed the transportation assets available. Palletized standard loads/flat racks help solve the planning and distribution problem. Class IV/Class V resupply for the defense is one of the most demanding mission load operations the unit must carry out and requires all the assets that can be made available. A total cooperative effort by the unit, including engineers, is required if the defense is to be adequately resourced.

CLASSES OF SUPPLY

4-32. There are ten classes of supplies. During defensive operations Class IV/Class V supplies require special engineer considerations. During offensive operations Class III(B) requires special consideration.

Class I

4-33. Class I consists of subsistence and gratuitous health and welfare items. Quantities are determined by the unit strength sent forward on digitized reports.

Class II

4-34. Organizational clothing and individual equipment (OCIE) support is not normally available at battalion. The supply and transportation (S&T) platoon of the HDC in the FSB provides supply point distribution of limited quantities of OCIE in the BSA. The HDC also provides supply support for other Class II items, such as tentage, tool sets, and administrative and housekeeping supplies. These items are moved to forward locations when dictated by the tactical situation and METT-TC. This function is performed by the quartermaster company in the DSB for division troops. In the aviation support area (ASA) the HSC in the DASB provides OCIE support.

Class III

4-35. Class III consists of POL, including petroleum fuels, lubricants, hydraulic and insulating oils, preservatives, liquids and gases, bulk chemical products, coolants, deicer and antifreeze

compounds. Refueling operations are conducted using a combination of unit distribution and supply point distribution.

Class IV

4-36. Cache or throughput to the barrier site of Class IV is a procedure used in preparation for defensive operations. The following items are normally throughput from corps assets based on unit requirements:

- Construction materials.
- Barrier materials.

Class V

4-37. Technological advancements in real-time forecasting of Class V sustainment requirements allow more effective planning of this support. In addition, throughput distribution of Class V items, packaged to weapon system requirements, and reduces the need for stockage of ammunition at ammunition supply points (ASP) and the resultant use of ammunition transfer points.

Class VI

4-38. This class covers personal demand items, such as candy, and toiletry articles that are normally sold through the exchange system during peacetime. In a combat environment, these items are sent with Class I as health and comfort packs (sundry packs). Class VI requirements are determined by supported strength.

Class VII

4-39. This class includes major end items. These are major pieces of equipment; assembled and ready for intended use, such as radios, tool sets, combat vehicles, and other major end items. Major end items that are destroyed or become inoperative are reported immediately to CSSCS by means of LOGSITREP reports. The supporting CSS unit replaces them, as they become available.

Class VIII

4-40. This class includes medical supplies, medical equipment sets and their components which are provided through the FSMC of the FSB and DSMC of the DSB. Included are individual medical supplies such as first-aid dressings, refills for first-aid kits, water purification tablets, and foot powder. Combat lifesaver bags are reported to CSSCS using the FBCB2 LOGSITREP.

Class IX

4-41. Repair parts are stocked at FSC and BSC maintenance platoon level based on usage requirements (shop stock and PLL). The FSC and BSC maintenance control section manages repair parts. Within the DSB the quartermaster company maintains the division troops Class IX (common) ASL. Supporting the aviation

brigade the DASB's HSC maintains the Class IX (air and common) ASL. The FBCB2 equipped maneuver brigade obtains repair parts either from the Class IX supply point in the HDC or by throughput from other echelons of supply support organizations. Parts are moved forward to the combat repair teams location during routine logistics package (LOGPAC) operations or as required. The maintenance platoons request Class IX items (less reparable exchange) and major Class IX subassemblies, such as engines and transmissions, by submitting requests to the supporting FSC or HDC supply and transportation platoons.

Class X

4-42. Class X consists of materiels in any other class of supply to support nonmilitary programs, such as agriculture and economic development.

LOGISTICS RELEASE POINT OPERATIONS

4-43. A LRP is the point along the supply route where the supported unit meets the supporting unit to transfer supplies. Likely functions performed at the LRP are:

- Synchronization.
- Load adjustment and cargo diversion.
- Transfer of responsibility.
- Updating battlefield intelligence.
- Driver briefing/vehicle maintenance.
- Decision making/C2 node.
- Link-up point for convoy guides.

4-44. Within a division's battlespace, one LRP is normally established in the vicinity of the BSA for each FSB, one for the DSB, and one for the DASB. Additional LRPs may be established based on METT-TC.

4-45. Optimally, the LRP is located along a well-protected supply route. The exact location takes advantage of cover and concealment. The LRP is large enough to accommodate expected inbound and outbound convoys under all weather conditions. At the LRP, dry cargo, liquid cargo, and flatrack transfer may occur. Trailer transfer may occur also. If practical, convoys may proceed past the support area LRP to the vicinity of the supported unit where supplies are then transloaded on to customer vehicles or downloaded on to the ground. When rotary wing aircraft are available for CSS resupply, the forward LZ may also be at or near the LRP.

4-46. Logistics release point security and C2 are critical. Routes into and out of each LRP must be secure. Security arrangements must be preplanned, synchronized, and executed. Convoys must include self-protection measures such as a combination of gun

trucks, military police escort vehicles, armed helicopters, and combat vehicle escorts. Field artillery, engineer, and air defense unit support may also be required.

4-47. Logistics release point C2 considerations include:

- Assured, secure communications.
- Requirement for liaison officers from supporting and supported units.
- Twenty-four hour operations.
- Situational understanding and situational understanding mechanism.
- Decision-making authority or access to key decision-makers.
- Need for linguists at LRPs.
- Location(s) of future LRPs.
- Frequency of LRP displacement.

FLATRACK COLLECTION POINT (FRCP) OPERATIONS

4-48. Flatrack collection points are predetermined points conveniently located to facilitate the harvesting and management of common user flatracks. Flatrack employment, management, and retrograde operations are the responsibility of distribution managers integrated at each echelon of support throughout the distribution pipeline. For detailed flatrack management operations and reporting procedures see the moving the force section in CSS operations chapter of this manual.

- Proposed FRCP locations are identified and reported to higher headquarters early in the planning process. Exact locations are reported immediately upon occupation. The FRCP location considerations include:
- Collocation with existing logistical nodes (SSAs, ATP vicinity, other supply points and collections points) or consolidation with other FRCPs on an area basis.
- Access to supply routes (MSRs/ASRs), feeder routes to supply routes, and traffic circulation. Maximize force protection, cover and concealment, and other security resources.

METHODS OF RESUPPLY

4-49. A company uses voice or digital means to request resupply and report status. The method used is determined after an analysis of the factors of METT-TC. The distribution methods of resupply are:

- **Supply point**. Supply point distribution requires unit representatives to move to a supply point to pick up their supplies.

- **Unit**. Unit distribution provides delivery of supplies directly to the unit. A unit representative meets the resupply package at the LRP and guides the package to the company's position.

4-50. Throughput to forward areas leverages configured loads, containerization, information, force structure design, technological enablers, and command and control relationships to deliver sustainment from the operational level directly to the customer or its direct support unit. Throughput bypasses one or more echelons in the supply system to minimize handling and speed delivery forward. Direct throughput relies on unity of command and situational understanding.

TECHNIQUES OF RESUPPLY

4-51. The tactical situation will dictate which technique of resupply the company will use: tailgate, service station, a variation of one type, or a combination of both types. The situation will also dictate when to resupply. Generally, the company should attempt to avoid resupply during offensive operations; resupply should be done during mission transition. Resupply is unavoidable during defensive missions of long duration.

4-52. In the **tailgate** technique, fuel and ammunition trucks, which have been handed off to the platoon sergeants (PSGs), are brought to individual vehicles. This method is used when routes leading to vehicle positions are available, and the company is not under direct enemy observation and fire. It is time-consuming, but it is useful in maintaining stealth during defensive missions because the vehicles do not have to move. If necessary, certain supplies can be hand-carried to vehicle positions to further minimize signatures. See Figure 4-1.

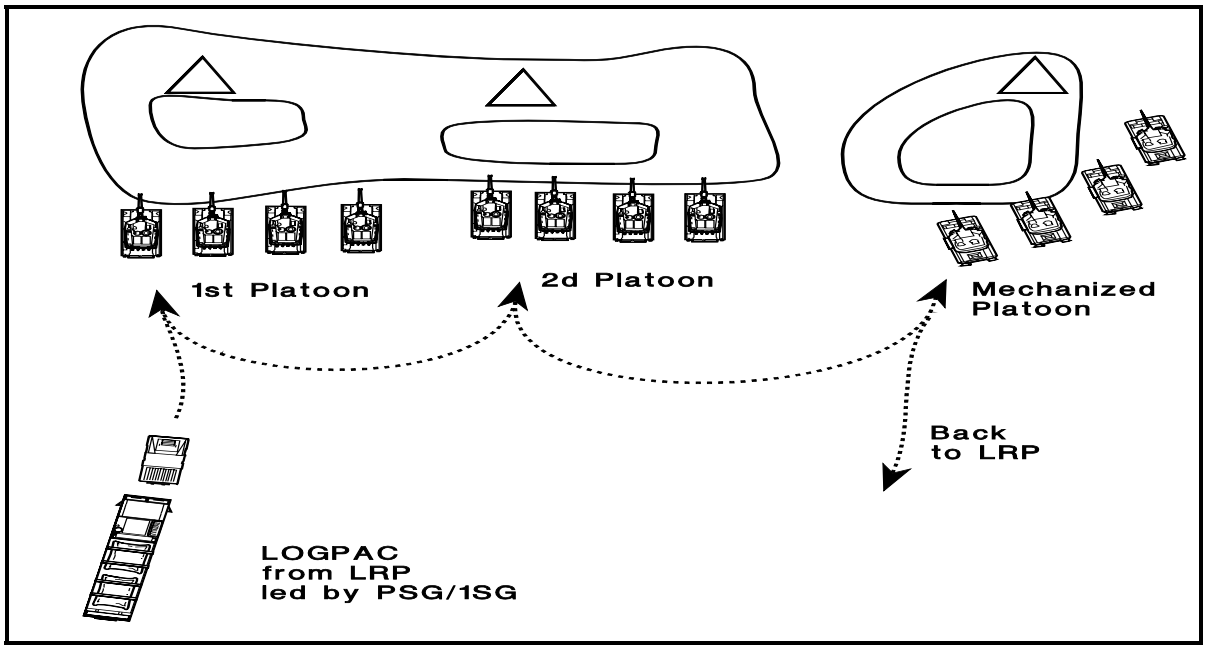

Figure 4-1. Tailgate LOGPAC

4-53. In the **service station** technique, vehicles move to a centrally located point for rearming and refueling, either by section, platoon, or an entire company. Service station resupply is inherently faster than the tailgate method, because vehicles must move and concentrate, however, it increases the security risk. See Figure 4-2.

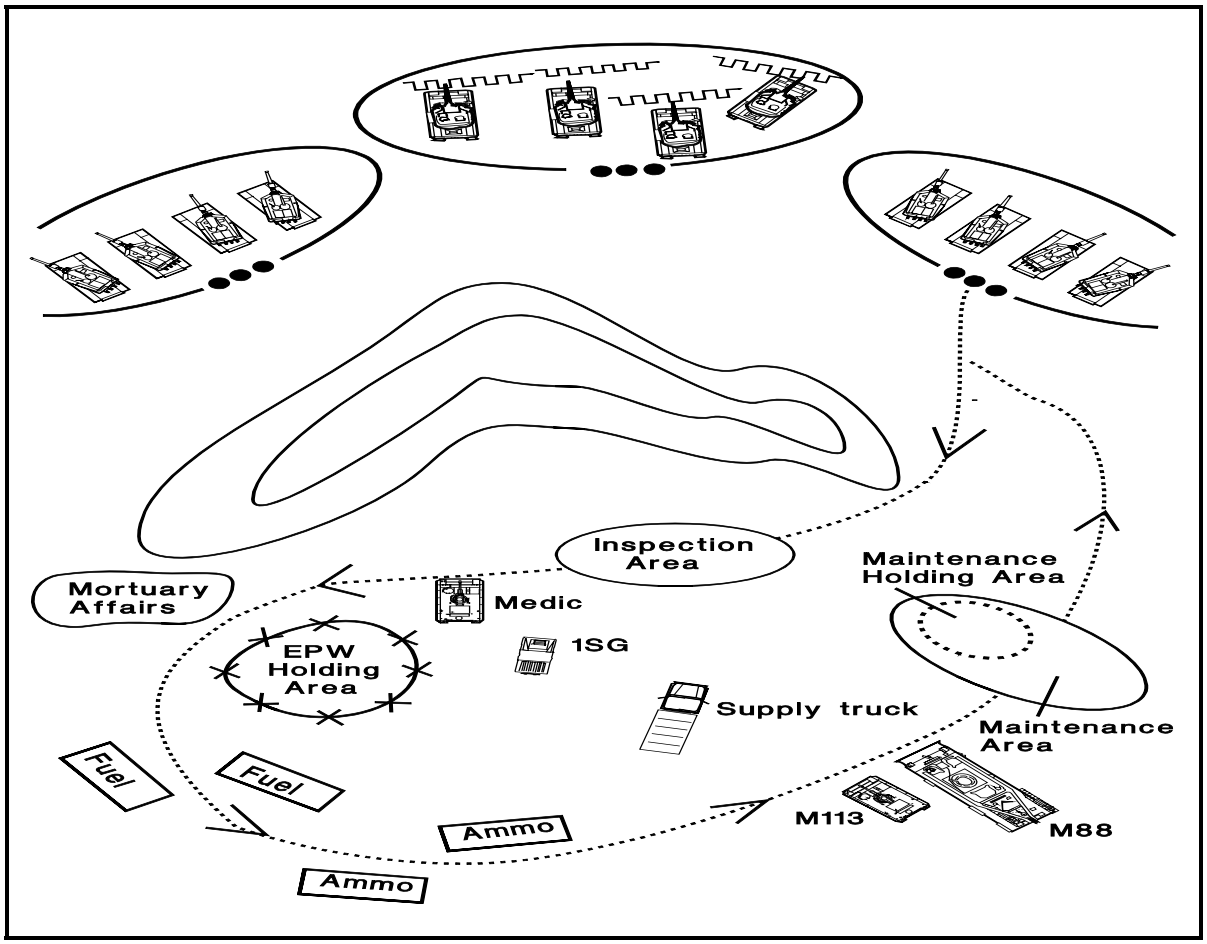

Figure 4-2. Service Station LOGPAC

4-54. A company commander can vary the specifics of the two basic techniques, or he can use them in combination for various platoons. During a defensive mission, for example, he may use the tailgate technique for selected forward observation post (OPs), and the service station method for the remainder of the company located in their positions. See Figure 4-3.

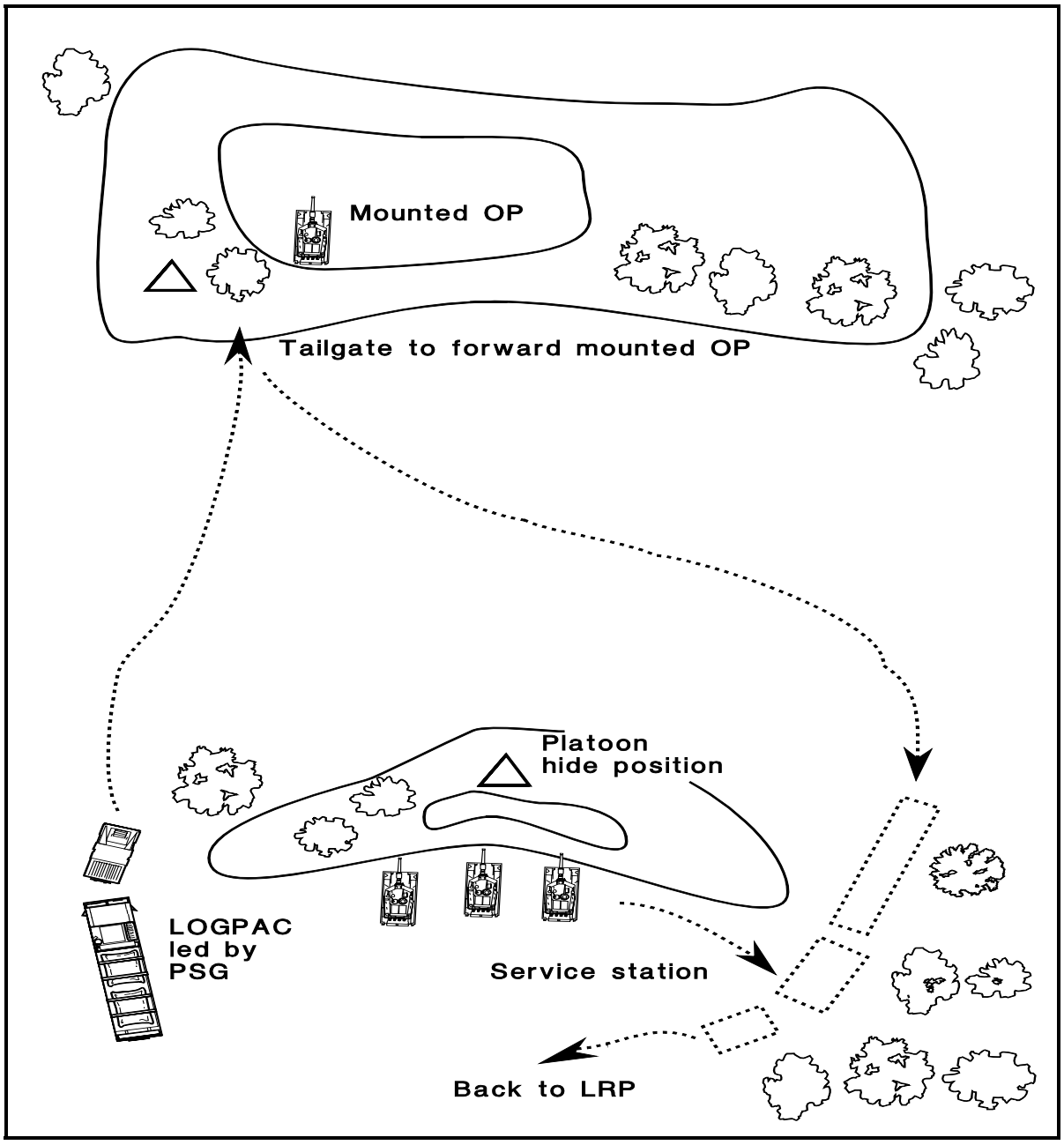

Figure 4-3. Modified Tailgate LOGPAC

IMMEDIATE RESUPPLY

4-55. Immediate resupply, normally involving Classes III, IV, and V, is executed when the company has such an urgent need for resupply that it cannot wait for the routine LOGPAC. Immediate resupply procedures start with the redistribution of supplies, for example, the redistribution of ammunition in individual vehicles, within the platoon, followed by cross leveling of ammunition

between platoons. It is better to have four Bradley fighting vehicles (BFVs) with 50 rounds of 25-millimeter ammunition each than two BFVs with 100 rounds and two others with none.

4-56. The commander, XO or 1SG transmits a “call for support” for Class III/IV/V through FBCB2 to the support operations section of the FSB. Immediate supplies are brought forward by the S&T platoon of the HDC. Based on the enemy situation, the platoon may conduct resupply while in contact with the enemy. Two techniques are used to resupply platoons in contact:

- Limited supplies are brought forward to the closest concealed position, where the tailgate technique of resupply is used.
- Individual vehicles or sections disengage and move to a resupply point, obtain their supplies, and then return to the tactical mission. This is a version of the service station technique.

OFFENSIVE OPERATIONS

4-57. The goal of CSS offensive planning is to ensure the division warfighters begin the tactical operation with their basic loads of all classes of supply and planned resupply is coordinated. The planning process for DISCOM operations is led by the division support operations. The planning tool most critical to the sustainment is the enemy course of action (most likely and most dangerous). The common denominator between the CSS plan and the maneuver plan is the S2’s assessment of the enemy’s courses of action.

4-58. Accurate offensive CSS planning will reduce the immediate resupply focus to the individual combat vehicle. By identifying the point of consumption by the warfighters, the DISCOM, DSB, DASB, and FSB support operations will be able to position mission-tailored support.

4-59. The two most critical supplies for offensive operations are Class III and Class V. The DISCOM sustainment cell will direct the movement of resources to resupply planned or forecasted requirements, as stated in the CSS support matrix. The resupply of the division may come from the DSB.

DEFENSIVE OPERATIONS

4-60. The CSS defensive plans are characterized by a clear and defined time at which the CSS assets will begin to conduct survivability operations and discontinue mission support. However, mission supports the mobility and survivability efforts of the division rear.

4-61. The most critical supplies for the preparation for the defense are Classes III, IV, and V. Class III may be critical depending on the type of defense and possible follow on missions. Routine resupply of planned/forecasted requirements will be directed to

designated units as stated in the CSS support matrix. Class IV will be pushed from corps directly to the emplacement site. Class V is given the highest priority of all critical supplies during defensive operations. The increased expenditures of ammunition will significantly impact transportation assets. Throughput of supplies from the corps to lowest level SSA will be used to expedite deliveries.

URBAN WARFARE CSS OPERATIONS

4-62. There is an increased likelihood of U.S. forces fighting in urban environments, which is the preferred battlespace for many potential adversaries. Most wars have included major battles in and around urban areas with U.S. deployments being centered on or in the vicinity of urban areas. The CSS organizations must have the capabilities to support units in combat and peace operations urban environments. Mechanized and armored divisions, although not ideally suited for urban operations, may have to conduct various missions in or in the vicinity of urban areas.

4-63. The MOUT is a significant challenge for CSS personnel to prepare for. Commanders identify those cities in their areas of responsibility that could become urban battlefields and direct their staffs to prepare detailed studies for those possible contingencies. Developments and refinements in force structure, equipment design, and CSS procedures support the tactical mission. During MOUT, the terrain and the nature of the operations create unique demands on support units and operations. The CSS units must be included in joint and multi-national urban warfare training. Increased ammunition consumption, high casualty rates, and transportation difficulties resulting from rubble and the decentralized nature of operations all make CSS challenging.

4-64. Historically, urban combat operations have required a significant amount of time and quantities of ammunition and other CSS. Assaults on cities cause heavy military and civilian casualties and shattered cities resulting in increased stress on CSS systems. The DISCOM may be called upon to supply food, shelter and public safety services to indigenous populations.

CSS SITUATIONAL UNDERSTANDING IN URBAN OPERATIONS

4-65. Knowledge of the urban battlespace as it pertains to logistics preparation of the urban battlefield is critical in terms of the following:

- Supported commanders' intents and concepts of operation.
- Transportation infrastructure (air, rail, waterways, pipelines, subway).
- Telecommunications and automation network posture.
- Traffic patterns/flow/selection of main and alternate supply routes.

- Local resources with military sustainment value.
- Local population sentiments (friendly/non-friendly).
- Contracting, bartering, and trading capabilities.
- The CSS commanders' access to intelligence preparation of the battlefield (IPB) products.

4-66. Other CSS factors in an urban environment:

- Expect increased consumption of small arms ammunition and explosives.
- Expect increased consumption of precision munitions.
- Expect decreased consumption in certain large-caliber and area-type munitions.
- Expect increased usage of non-lethal munitions.
- Expect increased aerial resupply requests.
- Expect increased medical workload (increased casualties).
- Expect increased mortuary affairs workload.
- Routes within an urban area can be denied easily.
- Movements' control is more complex.
- Force protection of CSS nodes and convoys is exacerbated in urban areas. Vertical ambushes and other terrorist-type attacks are real threats to CSS activities.
- Smaller resupply vehicles (HEMTT/PLS) may be in greater demand than tractor-trailers.
- Gun trucks are required to protect convoys.
- Expect the operation to be asymmetric (not linear) and multi-dimensional (building tops can be the high ground).
- Adequate CSS C4ISR may be nearly impossible within a large urban area. Avoid sites where communications are severely degraded.
- Urban areas afford numerous CSS hide locations (warehouses/industrial parks).
- Understanding the Law of Land Warfare (FM 27-10) and applicable rules of engagement (ROE) are imperative.
- Expect refugee and displaced person sustainment missions.
- Expect support requirements from other services, combined or coalition organizations (NGOs), and private volunteer organizations (PVOs).